Index

Author index*

A

ALPERN, MATHEW. Simultaneous brightness contrast for flashes of light of different durations, 47

ARMALY, MANSOUR F., AND HALASA, ADNAN H. The effect of external compression of the eye on intraocular pressure. I. Its variations with magnitude of compression and with age, 591

— AND —. The effect of external compression of the eye on intraocular pressure. II. Recovery: Tonographic changes and the influence of pharmacologic agents, 599

ARONOVSKY, ETA, LEVARI, RUTH, KORNBLUETH, WALTER, AND WERTHEIMER, ERNST. Comparison of metabolic activities of orbital fat with those of other adipose tissues, 259

B

BÁRÁNY, ERNST H. A mathematical formulation of intraocular pressure as dependent on secretion, ultrafiltration, bulk outflow, and osmotic reabsorption of fluid, 584

— Applanation tonometry and ophthalmoscopy of the vervet monkey (Cercopithecus ethiops) in phencyclidine catalepsia, 322

BECKER, BERNARD. Ouabain and aqueous humor dynamics in the rabbit eye, 325

— (*See* KOLKER, MOSES, CONSTANT, AND BECKER), 316

BEINHOCKER, GILBERT D. (*See* COPENHAVER AND BEINHOCKER), 393

BELL, SAMUEL D., JR., NICHOLS, ROGER L., AND HADDAD, NADIM A. The immunology of the trachoma agent with a preliminary report on field trials of vaccine, 471

BERGGREN, LENNART. Passage out of the eye of substances of low and high molecular weights, 305

BERNSTEIN, HOWARD, ZVAIFLER, NATHAN, RUBIN, MARTIN, AND MANSOUR, SISTER AGNES MARY. The ocular deposition of chloroquine, 384

BLOOMGARDEN, CHARLES I. (*See* JAMPEL AND BLOOMGARDEN), 265

BRECHER, GERHARD A. (*See* EASTMAN, GUTH, AND BRECHER), 37

BREITFELLER, MONA (*See* NAJAC, COOPER, JACOBSON, SHAMOS, AND BREITFELLER), 32

BUNTING, KENNETH W. (*See* PATTERSON AND BUNTING), 612

BURTON, MARGARET (*See* LERMAN, ZIGMAN, BURTON, AND FOUNTAINE), 617

— (*See* ZIGMAN, BURTON, FOUNTAINE, AND LERMAN), 621

C

CHAPMAN, GEORGE B., JONES, IRA S., AND SPELSBERG, WALTER W. An electron microscope study of rhabdomyosarcoma, 538

COLEMAN, VIRGINIA (*See* CORWIN, COLEMAN, RIEGELMAN, OKUMOTO, JAWETZ, AND THYGESON), 578

CONSTANT, MARGUERITE A., AND FALCH, JOHN. Phosphate and protein concentrations of intraocular fluids. I. Effect of carbonic anhydrase inhibition in young and old rabbits, 332

— (*See* KOLKER, MOSES, CONSTANT, AND BECKER), 316

COOPER, BLOSSOM (*See* NAJAC, COOPER, JACOBSON, SHAMOS, AND BREITFELLER), 32

COOPER, WILLIAM C., HALBERT, SEYMOUR P., AND MANSKI, W. J. Immunochemical analysis of vitreous and subretinal fluid, 369

COPENHAVER, RICHARD M., AND BEINHOCKER, GILBERT D. Evoked occipital potentials recorded from scalp electrodes in response to focal visual illumination, 393

CORWIN, MARTIN E., COLEMAN, VIRGINIA, RIEGELMAN, SIDNEY, OKUMOTO, MASAO, JAWETZ, ERNEST, AND THYGESON, PHILLIPS. Effect of IUDR and amethopterin on experimental herpes simplex keratitis, 578

COULOMBRE, ALFRED J., STEINBERG, SONIA N., AND COULOMBRE, JANE L. The role of intraocular pressure in the development of the chick eye. V. Pigmented epithelium, 83

COULOMBRE, JANE L. (*See* COULOMBRE, STEINBERG, AND COULOMBRE), 83

D

DISCHE, ZACHARIAS, AND ZELMENIS, GINEVRA. Glycoproteins of the lens in relation to age and cataract formation. II. Glycoproteins of lens fibers of rabbit, 90

— ZELMENIS, GINEVRA, AND LARYS, NINA. Glycoproteins of the lens in relation to age and cataract formation. III. Differences in composition and distribution of the different regions of the lens, 630

E

EASTMAN, ARTHUR A., GUTH, SYLVESTER K., AND BRECHER, GERHARD A. Instrument with variable beam splitter for measuring contrast sensitivity, 37

ECONOMON, JOANNE W., SILVERSTEIN, ARTHUR M., AND ZIMMERMAN, LORENZ E. Band keratopathy in a rabbit colony, 361

EISENLOHR, JOHN E. (*See* LANGHAM AND EISENLOHR), 72

ENOCH, JAY M. The use of tetrazolium to distinguish between retinal receptors exposed and not exposed to light, 16

F

FALCH, JOHN (*See* CONSTANT AND FALCH), 332

FEINBERG, RICHARD (*See* LOWENSTEIN, FEINBERG, AND LOEWENFELD), 138

FINE, BEN S., AND ZIMMERMAN, LORENZ E. Light and electron microscopic observations on the ciliary epithelium in man and rhesus monkey, 105

— AND —. Observations of the rod and cone layer of the human retina, 446

*February, pp. 1-104; April, pp. 105-228; June, pp. 229-304; August, pp. 305-408; October, pp. 409-522; December, pp. 523-660.

FOSTER, LEONARD (*See* NOZAKI, FOSTER, AND SERY), 641
FOUNTAINE, JEANNETTE (*See* LERMAN, ZIGMAN, BURTON, AND FOUNTAINE), 617
— (*See* ZIGMAN, BURTON, FOUNTAINE, AND LERMAN), 621
FOWLKS, W. L., WITH THE TECHNICAL ASSISTANCE OF HAVENER, VIRGINIA R., AND GOOD, JAMES S. Meridional flow from the corona ciliaris through the pararetinal zone of the rabbit vitreous, 63
FRANGUELLI, RICCARDO (*See* MARAINI, FRANGUELLI, AND PERALTA), 567
FREEDMAN, JEROME K., AND POTTS, ALBERT M. Repression of glutaminase I in the rat retina by administration of sodium-L-glutamate II, 252

G

GRAYSTON, J. THOMAS. Trachoma, biology of the virus, 460
GREEN, MORRIS, AND SCHWARTZ, ROBERT S. The catabolism of I-131-insulin by rat lens homogenates, 635
GOOD, JAMES S. (*See* FOWLKS), 63
GUTH, SYLVESTER K. (*See* EASTMAN, GUTH, AND BRECHER), 37

H

HADDAD, NADIM A. (*See* BELL, NICHOLS, AND HADDAD), 471
HALASA, ADNAN H. (*See* ARMALY AND HALASA), 591
— (*See* MANSOUR AND HALASA), 599
HALBERT, SEYMOUR P. (*See* COOPER, HALBERT, AND MANSKI), 369
HAUSLER, H. R., SIBAY, T. M., AND STACHOWSKA, B. Observation of retinopathy in metahypophyseal diabetic Chinese hamsters, 378
HAVENER, VIRGINIA R. (*See* FOWLKS), 63
HOGAN, MICHAEL J. Publications, 415
— Remarks made on acceptance of the Proctor Medal Award, 412
— The vitreous, its structure, and relation to the ciliary body and retina, Proctor Award Lecture, 418
HOWARD, GEORGE M. (*See* KROLL, KUWABARA, AND HOWARD), 523

I

ISHIKAWA, TOYOKO. Fine structure of retinal vessels in man and the macaque monkey, 1

J

JACOBSON, JERRY H. (*See* NAJAC, COOPER, JACOBSON, SHAMOS, AND BREITFELLER), 32
JAMPEL, ROBERT S., AND BLOOMGARDEN, CHARLES I. Individual extraocular muscle function from faradic stimulation of the oculomotor and trochlear nerves of the macaque, 265
JAWETZ, ERNEST (*See* CORWIN, COLEMAN, RIEGELMAN, OKUMOTO, JAWETZ, AND THYGESON), 578
JONES, IRA S. (*See* CHAPMAN, JONES, AND SPELSBERG), 538

K

KAUFMAN, HERBERT E. Chemotherapy of herpes keratitis, 504
— (*See* MALONEY AND KAUFMAN), 55
KINSEY, V. EVERETT, AND REDDY, D. V. N. Studies on the crystalline lens. X. Transport of amino acids, 229
— (*See* REDDY AND KINSEY), 237
KOLKER, ALLAN E., MOSES, ROBERT A., CONSTANT, MARGUERITE A., AND BECKER, BERNARD. The development of glaucoma in rabbits, 316
KORNBLUETH, WALTER (*See* ARONOVSKY, LEVARI, KORNBLUETH, AND WERTHEIMER), 259
KROLL, ARNOLD J., KUWABARA, TOICHIRO, AND HOWARD, GEORGE M. Electron microscopy of rhabdomyosarcoma of the orbit, 523
KUCK, JOHN F. R., JR. Sugar and sugar alcohol levels in the aging rat lens, 607
KURIMOTO, SHINJI, AND NEWELL, FRANK W. Localization of phosphorylase in the alloxan-diabetic rat retina, 24
KUWABARA, TOICHIRO (*See* KROLL, KUWABARA, AND HOWARD), 523

L

LANGHAM, MAURICE E., AND EISENLOHR, JOHN E. A manometric study of the rate of fall of the intraocular pressure in the living and dead eyes of human subjects, 72
LARYS, NINA (*See* DISCHE, ZEIMENIS, AND LARYS), 630
LEOPOLD, IRVING H., AND SERY, THEODORE W. Epidemiology of herpes simplex keratitis, 498
LERMAN, SIDNEY, ZIGMAN, SEYMOUR, BURTON, MARGARET, AND FOUNTAINE, JEANNETTE. Nucleic acid metabolism in the lens. I. Isolation and composition of RNA, 617
— AND ZIGMAN, SEYMOUR. Nucleic acid metabolism in the lens. III. Effect of x-radiation, 626
— (*See* ZIGMAN, BURTON, FOUNTAINE, AND LERMAN), 621
LEVARI, RUTH (*See* ARONOVSKY, LEVARI, KORNBLUETH, AND WERTHEIMER), 259
LOEWENFELD, IRENE E. (*See* LOWENSTEIN, FEINBERG, AND LOEWENFELD), 138
LOWENSTEIN, OTTO, FEINBERG, RICHARD, AND LOEWENFELD, IRENE E. Pupillary movements during acute and chronic fatigue, 138

M

MCKEE, ALBERT P. The biology of herpes simplex virus, 490
MALONEY, EMILY D., AND KAUFMAN, HERBERT E. Antagonism and toxicity of IDU by its degradation products, 55
MANSKI, W. J. (*See* COOPER, HALBERT, AND MANSKI), 369
MANSOUR, SISTER AGNES MARY (*See* BERNSTEIN, ZVAIFLER, RUBIN, AND MANSOUR), 384
MARAINI, GIOVANNI, FRANGUELLI, RICCARDO, AND PERALTA, SERGIO. Studies on the metabolism of the retina and lateral geniculate nucleus, 567
MIKULICICH, ADRIAN G., AND YOUNG, RICHARD W. Cell proliferation and displacement in the lens epithelium of young rats injected with tritiated thymidine, 344
MOSES, ROBERT A. (*See* KOLKER, MOSES, CONSTANT, AND BECKER), 316

N

NAJAC, HAROLD, COOPER, BLOSSOM, JACOBSON, JERRY H., SHAMOS, MORRIS, AND BREITFELLER, MONA. Direct thermocouple measurements of temperature rise and heat conduction in the rabbit retina, 32

NEWELL, FRANK W. (*See* KURIMOTO AND NEWELL), 24
NICHOLS, ROGER L. (*See* BELL, NICHOLS, AND HADDAD), 471
NOZAKI, MICHIO, FOSTER, LEONARD, AND SERY, THEODORE W. Uveal and other ocular tissue reactions to heterologous antilens capsule antibodies, 641

O

O KEEFE, N. THOMAS (*See* WOLTER AND O'KEEFE), 558
OKUMOTO, MASAO (*See* CORWIN, COLEMAN, RIEGELMAN, OKUMOTO, JAWETZ, AND THYGESON), 578

P

PATTERSON, JOHN W., AND BUNTING, KENNETH W. Factors limiting glycolysis in the rat lens, 612
PERALTA, SERGIO (*See* MARAINI, FRANGUELLI, AND PERALTA), 567
PETTIT, THOMAS H. A study of lens regeneration in the rabbit, 243
POLACK, FRANK M., SMELSER, GEORGE K., AND ROSE JEANETTE. The fate of cells in heterologous corneal transplants, 355
POTTS, ALBERT M. (*See* FREEDMAN AND POTTS), 252

R

REDDY, D. V. N., AND KINSEY, V. EVERETT. Transport of amino acids into intraocular fluids and lens in diabetic rabbits, 237
— (*See* KINSEY AND REDDY), 229
RIEGELMAN, SIDNEY (*See* CORWIN, COLEMAN, RIEGELMAN, OKUMOTO, JAWETZ, AND THYGESON), 578
ROSE, JEANETTE (*See* POLACK, SMELSER, AND ROSE), 355
RUBIN, MARTIN (*See* BERNSTEIN, ZVAIFLER, RUBIN, AND MANSOUR), 384

S

SCHAEFFER, E. M. Ultrastructural changes in moist chamber corneas, 272
SCHWARTZ, ROBERT S. (*See* GREEN AND SCHWARTZ), 635
SERY, THEODORE W. (*See* LEOPOLD AND SERY), 498
— (*See* NOZAKI, FOSTER, AND SERY), 641
SHAMOS, MORRIS (*See* NAJAC, COOPER, JACOBSON, SHAMOS, AND BREITFELLER), 32
SIBAY, T. M. (*See* HAUSLER, SIBAY, AND STACHOWSKA), 378
SILVERSTEIN, ARTHUR M. Effect of x-irradiation on the development of immunogenic uveitis, 58
— (*See* ECONOMON, SILVERSTEIN, AND ZIMMERMAN), 361
SMELSER, GEORGE K. (*See* POLACK, SMELSER, AND ROSE), 355
SPELSBERG, WALTER W. (*See* CHAPMAN, JONES, AND SPELSBERG), 538
STACHOWSKA, B. (*See* HAUSLER, SIBAY, AND STACHOWSKA), 378
STEINBERG, SONIA N. (*See* COULOMBRE, STEINBERG, AND COULOMBRE), 83

T

THYGESON, PHILLIPS. Epidemiologic observations on trachoma in the United States, 482
— On the presentation of the Proctor Medal of the Association for Research in Ophthalmology to Michael J. Hogan, 410
— (*See* CORWIN, COLEMAN, RIEGELMAN, OKUMOTO, JAWETZ, AND THYGESON), 578

W

WERTHEIMER, ERNST (*See* ARONOVSKY, LEVARI, KORNBLUETH, AND WERTHEIMER), 259
WOLTER, J. REIMER, AND O'KEEFE, N. THOMAS. Localization of nerve endings in relation to cholinesterase deposits in normal human eye muscles, 558

Y

YOUNG, FRANCIS A. The effect of restricted visual space on the refractive error of the young monkey eye, 571
YOUNG, RICHARD W. (*See* MIKULICICH AND YOUNG), 344

Z

ZELMENIS, GINEVRA (*See* DISCHE, ZELMENIS, AND LARYS), 630
— (*See* DISCHE AND ZELMENIS), 90
ZIGMAN, SEYMOUR, BURTON, MARGARET, FOUNTAINE, JEANNETTE, AND LERMAN, SIDNEY. Nucleic acid metabolism in the lens. II. Ribonuclease activity and RNA turnover, 621
— (*See* LERMAN, ZIGMAN, BURTON, AND FOUNTAINE), 617
— (*See* LERMAN AND ZIGMAN), 626
ZIMMERMAN, LORENZ E. (*See* ECONOMON, SILVERSTEIN, AND ZIMMERMAN), 361
— (*See* FINE AND ZIMMERMAN), 105, 446
ZVAIFLER, NATHAN (*See* BERNSTEIN, ZVAIFLER, RUBIN, AND MANSOUR), 384

Subject index*

A

Abstracts of papers presented at sectional meetings of the Association for Research in Ophthalmology, 98, 283

Acids, amino, transport (Kinsey and Reddy), 229
into intraocular fluids and lens in diabetic rabbits (Reddy and Kinsey), 237

Adipose tissues, comparison of metabolic activities of orbital fat with those of other (Aronovsky et al.), 259

Age and cataract formation, glycoproteins of lens in relation to. III. (Dische, Zelmenis, and Larys), 630
II. (Dische and Zelmenis), 90
variations of effect of external compression on intraocular pressure with (Armaly and Halasa), 591

Aging rat lens, sugar and sugar alcohol levels in (Kuck), 607

Alcohol, sugar, sugar and, in aging rat lens (Kuck), 607

Alloxan-diabetic rat retina, localization of phosphorylase in (Kurimoto and Newell), 24

Amethopterin, IUDR and, effect, on experimental herpes simplex keratitis (Corwin et al.), 578

Amino acids, transport (Kinsey and Reddy), 229
into intraocular fluids and lens in diabetic rabbits (Reddy and Kinsey), 237

Anhydrase inhibition, carbonic, in young and old rabbits, effect (Constant and Falch), 332

Announcements, 104, 304, 407, 519, 648

Antagonism and toxicity of IDU by its degradation products (Maloney and Kaufman), 55

Antibodies, heterologous antilens capsule, uveal and other ocular tissue reactions to (Nozaki, Foster, and Sery), 641

Antilens capsule antibodies, heterologous, uveal and other ocular tissue reactions to (Nozaki, Foster, and Sery), 641

Applanation tonometry and ophthalmoscopy of vervet monkey (Cercopithecus ethiops) in phencyclidine catalepsia (Bárány), 322

Aqueous humor dynamics, ouabain and, in rabbit eye (Becker), 325

Association for Research in Ophthalmology, Inc.
Constitution, 158
Proposed amendments, 161
By-laws, 164
Alphabetical list of members, 165
Geographical list of members, 210
Program for June National Meeting, 221
Program for December National Meeting, 519

B

Band keratopathy in rabbit colony (Economon, Silverstein, and Zimmerman), 361

Beam, variable, splitter for measuring contrast sensitivity, instrument with (Eastman, Guth, and Brecher), 37

Book review, 303

Brightness contrast, simultaneous, for flashes of light of different durations (Alpern), 47

C

Carbonic anhydrase inhibition in young and old rabbits, effect (Constant and Falch), 332

Catabolism of I-131-insulin by rat lens homogenates (Green and Schwartz), 635

Catalepsia, phencyclidine, applanation tonometry and ophthalmoscopy of vervet monkey (Cercopithecus ethiops) (Bárány), 322

Cataract formation, age and, glycoproteins of lens in relation to. III. (Dische, Zelmenis, and Larys), 630
II. (Dische and Zelmenis), 90

Cell proliferation and displacement in lens epithelium of young rats injected with tritiated thymidine (Mikulicich and Young), 344

Cells in heterologous corneal transplants, fate (Polack, Smelser, and Rose), 355

Chamber corneas, moist, ultrastructural changes in (Schaeffer), 272

Chemotherapy of herpes keratitis (Kaufman), 504

Chick eye, role of intraocular pressure in development (Coulombre, Steinberg, and Coulombre), 83

Chloroquine, ocular deposition (Bernstein et al.), 384

Cholinesterase deposits in normal human eye muscles, localization of nerve endings in relation to (Wolter and O'Keefe), 558

Ciliaris, corona, meridional flow from, through pararetinal zone of rabbit vitreous (Fowlks), 63

Ciliary body and retina, its structure and relation of vitreous to (Hogan), 418
epithelium in man and rhesus monkey, light and electron microscopic observations on (Fine and Zimmerman), 105

*February, pp. 1-104; April, pp. 105-228; June, pp. 229-304; August, pp. 305-408; October, pp. 409-522; December, pp. 523-660.

Compression, external, of eye, effect on intraocular pressure (Armaly and Halasa), 591, 599
Contrast sensitivity, instrument with variable beam splitter for measuring (Eastman, Guth, and Brecher), 37
simultaneous brightness, for flashes of light of different durations (Alpern), 47
Conduction, heat, in rabbit retina, direct thermocouple measurements of temperature rise and (Najac et al.), 32
Cone layer, rod and, of human retina, observations on (Fine and Zimmerman), 446
Corneal transplants, heterologous, fate of cells in (Polack, Smelser, and Rose), 355
Corneas, moist chamber, ultrastructural changes in (Schaeffer), 272
Corona ciliaris, meridional flow from, through pararetinal zone of rabbit vitreous (Fowlks), 63
Crystalline lens, studies on (Kinsey and Reddy), 229

D

Degradation products, antagonism and toxicity of IDU by its (Maloney and Kaufman), 55
Deposits, cholinesterase, in normal human eye muscles, localization of nerve endings in relation to (Wolter and O'Keefe), 558
Diabetic, alloxan, rat retina, localization of phosphorylase in (Kurimoto and Newell), 24
metahypophyseal, Chinese hamsters, retinopathy in, observation (Hausler, Sibay, and Stachowska), 378
rabbits, transport of amino acids into intraocular fluids and lens in (Reddy and Kinsey), 237
Diseases, viral, symposium on, 460

E

Electrodes, scalp, in response to focal visual illumination, evoked occipital potentials recorded from (Copenhaver and Beinhocker), 393
Electron, light and, microscopic observations on ciliary epithelium in man and rhesus monkey (Fine and Zimmerman), 105
microscope study of rhabdomyosarcoma (Chapman, Jones, and Spelsberg), 538
microscopy of rhabdomyosarcoma of orbit (Kroll, Kuwabara, and Howard), 523
Epidemiologic observations on trachoma in United States (Thygeson), 482
Epidemiology of herpes simplex keratitis (Leopold and Sery), 498
Epithelium, ciliary, in man and rhesus monkey, light and electron microscopic observations on (Fine and Zimmerman), 105
lens, of young rats injected with tritiated thymidine, cell proliferation and displacement in (Mikulicich and Young), 344
pigmented, development in chick eye (Coulombre, Steinberg, and Coulombre), 83
Eye, chick, role of intraocular pressure in development (Coulombre, Steinberg, and Coulombre), 83
muscles, normal human, localization of nerve endings in relation to cholinesterase deposits in (Wolter and O'Keefe), 558
passage out of, substances of low and high molecular weights (Berggren), 305
rabbit, ouabain and aqueous humor dynamics in (Becker), 325
young monkey, effect of restricted visual space on refractive error (Young), 571
Eyes, living and dead, of human subjects, manometric study of rate of fall of intraocular pressure in (Langham and Eisenlohr), 72
Extraocular muscle function, individual, from faradic stimulation of oculomotor and trochlear nerves of macaque (Jampel and Bloomgarden), 265

F

Faradic stimulation of oculomotor and trochlear nerves of macaque, individual extraocular muscle function from (Jampel and Bloomgarden), 265
Fat, orbital, comparison of metabolic activities, with those of other adipose tissues (Aronovsky et al.), 259
Fatigue, acute and chronic, pupillary movements during (Lowenstein, Feinberg, and Loewenfeld), 138
Field trials of vaccine, preliminary report on (Bell, Nichols, and Haddad), 471
Fine structure of retinal vessels in man and macaque monkey (Ishikawa), 1
Flow, meridional, from corona ciliaris through pararetinal zone of rabbit vitreous (Fowlks), 63
Fluid, vitreous and subretinal, immunochemical analysis (Cooper, Halbert, and Manski), 369
Fluids, intraocular, phosphate and protein concentrations. I. Effect of carbonic anhydrase inhibition of young and old rabbits (Constant and Falch), 332
and lens, intraocular, in diabetic rabbits, transport of amino acids into (Reddy and Kinsey), 237
Focal visual illumination, evoked occipital potentials recorded from scalp electrodes in response to (Copenhaver and Beinhocker), 393

G

Geniculate nucleus, lateral, retina and, studies on metabolism (Maraini, Franguelli, and Peralta), 567
Glaucoma in rabbits, development (Kolker et al.), 316
Glutaminase I, repression, in rat retina by administration of sodium-L-glutamate II (Freedman and Potts), 252
Glycoproteins of lens in relation to age and cataract formation. III. (Dische, Zelmenis, and Larys), 630
II. (Dische and Zelmenis), 90
Glycolysis in rat lens, factors limiting (Patterson and Bunting), 612

H

Hamsters, metahypophyseal diabetic Chinese, retinopathy in (Hausler, Sibay, and Stachowska), 378
Heat conduction in rabbit retina, direct thermocouple measurements of temperature rise and (Najac et al.), 32
Herpes keratitis, chemotherapy (Kaufman), 504
simplex keratitis, epidemiology (Leopold and Sery), 498
experimental, effect of IUDR and amethopterin on (Corwin et al.), 578
symposium on, 490
virus, biology (McKee), 490
Heterologous antilens capsule antibodies, uveal and other ocular tissue reactions to (Nozaki, Foster, and Sery), 641
corneal transplants, fate of cells in (Polack, Smelser, and Rose), 355
Homogenates, rat lens, catabolism of I-131-insulin by (Green and Schwartz), 635
Human eye muscles, normal, localization of nerve endings in relation to cholinesterase deposits in (Wolter and O'Keefe), 558
Human—Cont'd
retina, rod and cone layer, observations on (Fine and Zimmerman), 446
Humor dynamics, aqueous, ouabain and, in rabbit eye (Becker), 325

I

IDU, antagonism and toxicity, by its degradation products (Maloney and Kaufman), 55
Immunochemical analysis of vitreous and subretinal fluid (Cooper, Halbert, and Manski), 369
Immunogenic uveitis, effect of x-irradiation on development (Silverstein), 58
Immunology of trachoma agent with preliminary report on field trials of vaccine (Bell, Nichols, and Haddad), 471
Instrument with variable beam splitter for measuring contrast sensitivity (Eastman, Guth, and Brecher), 37
Insulin-I-131, catabolism, by rat lens homogenates (Green and Schwartz), 635
Intraocular fluids and lens in diabetic rabbits, transport of amino acids into (Reddy and Kinsey), 237
phosphate and protein concentrations. I. Effect of carbonic anhydrase inhibition in young and old rabbits (Constant and Falch), 332
pressure, effect of external compression of eye on (Armaly and Halasa), 591, 599
in living and dead eyes of human subjects, manometric study of rate of fall (Langham and Eisenlohr), 72
mathematical formulation, as dependent on secretion, ultrafiltration, bulk outflow, and osmotic reabsorption of fluid (Bárány), 584
role in development of chick eye (Coulombre, Steinberg, and Coulombre), 83
IUDR and amethopterin, effect on experimental herpes simplex keratitis (Corwin et al.), 578

K

Keratopathy, band, in rabbit colony (Economon, Silverstein and Zimmerman), 361
Keratitis, herpes, chemotherapy (Kaufman), 504
simplex, epidemiology (Leopold and Sery), 498
experimental, effect of IUDR and amethopterin on (Corwin et al.), 578

L

Lateral geniculate nucleus, retina and, studies on metabolism (Maraini, Franguelli, and Peralta), 567
Lens, aging rat, sugar and sugar alcohol levels in (Kuck), 607
crystalline, studies on (Kinsey and Reddy), 229
epithelium of young rats injected with tritiated thymidine, cell proliferation and displacement in (Mikulicich and Young), 344
glycoproteins, in relation to age and cataract formation. III. (Dische, Zelmenis, and Larys), 630
II. (Dische and Zelmenis), 90
intraocular fluids and, in diabetic rabbits, transport of amino acids into (Reddy and Kinsey), 237
nucleic acid metabolism in (Lerman et al.), 617, 621, 626
rat, factors limiting glycolysis in (Patterson and Bunting), 612
homogenates, catabolism of I-131-insulin by (Green and Schwartz), 635
regeneration in rabbit, study (Pettit), 243
Light and electron microscopic observations on ciliary epithelium in man and rhesus monkey (Fine and Zimmerman), 105

Light—Cont'd
flashes, of different durations, simultaneous brightness contrast for (Alpern), 47
use of tetrazolium to distinguish between retinal receptors exposed and not exposed to (Enoch), 16
Localization of nerve endings in relation to cholinesterase deposits in normal human eye muscles (Wolter and O'Keefe), 558

M

Macaque, individual extraocular muscle function from faradic stimulation of oculomotor and trochlear nerves (Jampel and Bloomgarden), 265
monkey, fine structure of retinal vessels in man and (Ishikawa), 1
Manometric study of rate of fall of intraocular pressure in living and dead eyes of human subjects (Langham and Eisenlohr), 72
Mathematical formulation of intraocular pressure as dependent on secretion, ultrafiltration, bulk outflow, and osmotic reabsorption of fluid (Bárány), 584
Measurements, direct thermocouple, of temperature rise and heat conduction in rabbit retina (Najac et al.), 32
Meridional flow from corona ciliaris through pararetinal zone of rabbit vitreous (Fowlks), 63
Metabolic activities, comparison, of orbital fat with those of other adipose tissues (Aronovsky et al.), 259
Metabolism, nucleic acid, in lens (Lerman et al.), 617, 621, 626
of retina and lateral geniculate nucleus, studies on (Maraini, Franguelli, and Peralta), 567
Metahypophyseal diabetic Chinese hamsters, observation of retinopathy in (Hausler, Sibay, and Stachowska), 378
Microscope, electron, study of rhabdomyosarcoma (Chapman, Jones, and Spelsberg), 538
Microscopic observations, light and electron, on ciliary epithelium in man and rhesus monkey (Fine and Zimmerman), 105
Microscopy, electron, of rhabdomyosarcoma of orbit (Kroll, Kuwabara, and Howard), 523
Molecular weights, substances of low and high, passage out of eye (Berggren), 305
Monkey eye, young, effect of restricted visual space on refractive error (Young), 571
rhesus, light and electron microscopic observations on ciliary epithelium in man and (Fine and Zimmerman), 105
vervet, (Cercopithecus ethiops), applanation tonometry and ophthalmoscopy of, in phencyclidine catalepsia (Bárány), 322
Muscle function, individual extraocular, from faradic stimulation of oculomotor and trochlear nerves of macaque (Jampel and Bloomgarden), 265
Muscles, normal human eye, localization of nerve endings in relation to cholinesterase deposits in (Wolter and O'Keefe), 558

N

Nucleic acid metabolism in lens (Lerman et al.), 617, 621, 626
Nucleus, lateral geniculate, retina and, studies on metabolism (Maraini, Franguelli, and Peralta), 567
Nerve endings, localization, in relation to cholinesterase deposits in normal human eye muscles (Wolter and O'Keefe), 558
Nerves, oculomotor and trochlear, of macaque, individual extraocular muscle function from faradic stimulation (Jampel and Bloomgarden), 265

O

Observations, light and electron microscopic, on ciliary epithelium in man and rhesus monkey (Fine and Zimmerman), 105
epidemiologic, on trachoma in United States (Thygeson), 482
on rod and cone layer of human retina (Fine and Zimmerman), 446
Occipital potentials, evoked, recorded from scalp electrodes in response to focal visual illumination (Copenhaver and Beinhocker), 393
Ocular deposition of chloroquine (Bernstein et al.), 384
tissue reactions, uveal and, to heterologous antilens capsule antibodies (Nozaki, Foster, and Sery), 641
Oculomotor and trochlear nerves of macaque, individual extraocular muscle function from faradic stimulation (Jampel and Bloomgarden), 265
Ophthalmoscopy, applanation tonometry and, of vervet monkey (Cercopithecus ethiops) in phencyclidine catalepsia (Bárány), 322
Orbit, rhabdomyosarcoma of, electron microscopy (Kroll, Kuwabara, and Howard), 523
Orbital fat, comparison of metabolic activities, with those of other adipose tissues (Aronovsky et al.), 259
Osmotic reabsorption of fluid, secretion, ultrafiltration, bulk outflow, and, mathematical formulation of intraocular pressure as dependent on (Bárány), 584

Ouabain and aqueous humor dynamics in rabbit eye (Becker), 325

P

Pararetinal zone of rabbit vitreous, meridional flow from corona ciliaris through (Fowlks), 63

Pharmacologic agents and tonographic changes, influence on intraocular pressure (Armaly and Halasa), 599

Phencyclidine catalepsia, applanation tonometry and ophthalmoscopy of vervet monkey (Cercopithecus ethiops) (Bárány), 322

Phosphate and protein concentrations of intraocular fluids. I. Effect of carbonic anhydrase inhibition in young and old rabbits (Constant and Falch), 332

Phosphorylase, localization, in alloxan-diabetic rat retina (Kurimoto and Newell), 24

Pigmented epithelium, development in chick eye (Coulombre, Steinberg, and Coulombre), 83

Pressure, intraocular, effect of external compression of eye on (Armaly and Halasa), 591, 599
- in living and dead eyes of human subjects, manometric study of rate of fall (Langham and Eisenlohr), 72
- mathematical formulation, as dependent on secretion, ultrafiltration, bulk outflow, and osmotic reabsorption of fluid (Bárány), 584
- role in development of chick eye (Coulombre, Steinberg, and Coulombre), 83

Proctor Award Lecture: The vitreous, its structure, and relation to ciliary body and retina (Hogan), 418

Proctor Medal Award, remarks on acceptance (Hogan), 412

Proctor Medal of the Association for Research in Ophthalmology, presentation to Michael J. Hogan (Thygeson), 410

Protein concentrations, phosphate and, of intraocular fluids. I. Effect of carbonic anhydrase inhibition in young and old rabbits (Constant and Falch), 332

Pupillary movements during acute and chronic fatigue (Lowenstein, Feinberg, and Loewenfeld), 138

R

Rabbit colony, band keratopathy in (Economon, Silverstein, and Zimmerman), 361
- eye, ouabain and aqueous humor dynamics in (Becker), 325
- lens regeneration in, study (Pettit), 43
- retina, direct thermocouple measurements of temperature rise and heat conduction in (Najac et al.), 32
- vitreous, meridional flow from corona ciliaris through pararetinal zone (Fowlks), 63

Rabbits, diabetic, transport of amino acids into intraocular fluids and lens in (Reddy and Kinsey), 237
- glaucoma in, development (Kolker et al.), 316
- young and old, effect of carbonic anhydrase inhibition in (Constant and Falch), 332

Rat lens, aging, sugar and sugar alcohol levels in (Kuck), 607
- factors limiting glycolysis in (Patterson and Bunting), 612
- homogenates, catabolism of I-131-insulin by (Green and Schwartz), 635
- retina, alloxan-diabetic, localization of phosphorylase in (Kurimoto and Newell), 24
- repression of glutaminase I in, by administration of sodium-L-glutamate II (Freedman and Potts), 252

Rats, young, injected with tritiated thymidine, cell proliferation and displacement in lens epithelium (Mikulicich and Young), 344

Receptors, retinal, exposed and not exposed to light, use of tetrazolium to distinguish between (Enoch), 16

Refractive error of young monkey eye, effect of restricted visual space on (Young), 571

Regeneration, lens, in rabbit, study (Pettit), 243

Repression of glutaminase I in rat retina by administration of sodium-L-glutamate II (Freedman and Potts), 252

Retina, alloxan-diabetic rat, localization of phosphorylase in (Kurimoto and Newell), 24
- ciliary body and, vitreous, its structure, and relation to (Hogan), 418
- human, rod and cone layer of, observations on (Fine and Zimmerman), 446
- and lateral geniculate nucleus, studies on metabolism (Maraini, Franguelli, and Peralta), 567
- rabbit, direct thermocouple measurements of temperature rise and heat conduction in (Najac et al.), 32
- rat, repression of glutaminase I in, by administration of sodium-L-glutamate II (Freedman and Potts), 252

Retinal receptors exposed and not exposed to light, use of tetrazolium to distinguish between (Enoch), 16
- vessels, fine structure, in man and macaque monkey (Ishikawa), 1

Retinopathy in metahypophyseal diabetic Chinese hamsters, observation (Hausler, Sibay, and Stachowska), 378

Rhabdomyosarcoma, electron microscope study (Chapman, Jones, and Spelsberg), 538

Rhabdomyosarcoma—Cont'd
of orbit, electron microscopy (Kroll, Kuwabara, and Howard), 523
Rhesus monkey, light and electron microscopic observations on ciliary epithelium in man and (Fine and Zimmerman), 105
Ribonuclease activity and RNA turnover in lens (Zigman et al.), 621
RNA, isolation and composition, in lens (Lerman et al.), 617
Rod and cone layer of human retina, observations on (Fine and Zimmerman), 446

S

Scalp electrodes in response to focal visual illumination, evoked occipital potentials recorded from (Copenhaver and Beinhocker), 393
Secretion, ultrafiltration, bulk outflow, and osmotic reabsorption of fluid, mathematical formulation of intraocular pressure as dependent on (Bárány), 584
Simultaneous brightness contrast for flashes of light of different durations (Alpern), 47
Sodium-L-glutamate II, repression of glutaminase I in rat retina by administration (Freedman and Potts), 252
Splitter, variable beam, for measuring contrast sensitivity, instrument with (Eastman, Guth, and Brecher), 37
Structure, fine, of retinal vessels in man and macaque monkey (Ishikawa), 1
of vitreous, and relation to ciliary body and retina (Hogan), 418
Subretinal fluid, vitreous and, immunochemical analysis (Cooper, Halbert, and Manski), 369
Sugar alcohol levels, sugar and, in aging rat lens (Kuck), 607
Symposium on viral diseases, 460

T

Temperature rise and heat conduction in rabbit retina, direct thermocouple measurements (Najac et al.), 32
Tetrazolium, use, to distinguish between retinal receptors exposed and not exposed to light (Enoch), 16
Thermocouple, direct, measurements of temperature rise and heat conduction in rabbit retina (Najac et al.), 32
Thymidine, tritiated, cell proliferation and displacement in lens epithelium of young rats injected with (Mikulicich and Young), 344
Tissues, adipose, comparison of metabolic activities of orbital fat with those of other (Aronovsky et al.), 259
Tonographic changes and influence of pharmacologic agents on intraocular pressure (Armaly and Halasa), 599
Tonometry, applanation, and ophthalmoscopy of vervet monkey (Cercopithecus ethiops) in phencyclidine catalepsia (Bárány), 322
Toxicity of IDU by its degradation products, antagonism and (Maloney and Kaufman), 55
Trachoma agent, immunology, with preliminary report on field trials of vaccine (Bell, Nichols, and Haddad), 471
biology of virus (Grayston), 460
in United States, epidemiologic observations on (Thygeson), 482
Transplants, heterologous corneal, fate of cells in (Polack, Smelser, and Rose), 355
Transport of amino acids into intraocular fluids and lens in diabetic rabbits (Reddy and Kinsey), 237
Tritiated thymidine, cell proliferation and displacement in lens epithelium of young rats injected with (Mikulicich and Young), 344
Trochlear nerves, oculomotor and, of macaque, individual extraocular muscle function from faradic stimulation (Jampel and Bloomgarden), 265

U

Ultrafiltration, secretion, bulk outflow, and osmotic reabsorption of fluid, mathematical formulation of intraocular pressure as dependent on (Bárány), 584
Ultrastructural changes in moist chamber corneas (Schaeffer), 272
Uveal and other ocular tissue reactions to heterologous antilens capsule antibodies (Nozaki, Foster, and Sery), 641
Uveitis, immunogenic, effect of x-irradiation on development (Silverstein), 58

V

Vaccine, preliminary report on field trials, immunology of trachoma agent with (Bell, Nichols, and Haddad), 471
Vervet monkey (Cercopithecus ethiops) in phencyclidine catalepsia, applanation tonometry and ophthalmoscopy (Bárány), 322
Vessels, retinal, fine structure, in man and macaque monkey (Ishikawa), 1
Viral diseases, symposium on, 460
Virus, herpes simplex, biology (McKee), 490
trachoma, biology (Grayston), 460
Visual illumination, focal, evoked occipital potentials recorded from scalp electrodes in response to (Copenhaver and Beinhocker), 393

Visual—Cont'd
space, restricted, effect on refractive error of young monkey eye (Young), 571
Vitreous, its structure, and relation to ciliary body and retina (Hogan), 418
Vitreous—Cont'd
rabbit, meridional flow from corona ciliaris through pararetinal zone (Fowlks), 63
and subretinal fluid, immunochemical analysis (Cooper, Halbert, and Manski), 369

X

X-irradiation, effect on develop
ment of immunogeni
uveitis (Silverstein)
58
X-radiation, effect in lens (Le
man and Zigman), 62